

ABSTRACT OF THE DISCLOSURE

An optical device wherein an optical component and a plurality of light emitting elements are mounted on an identical substrate, a level of a surface on which the optical component is mounted is different from that of a surface on which the light emitting elements are mounted by a step provided on the substrate, at least one plane vertical to the surface on which the optical component is mounted and located on a periphery of the substrate is opened, a reflecting surface, a transmitting surface or a diffraction grating surface of the optical component is provided along sides generated by the step provided in the substrate, optical axes of the plurality of light emitting elements of which polarization axes are in parallel with each other intersect with each other on the surface, and an exit light beam of the light emitting elements is emitted from the opened plane.